CLAIMS

What is claimed is:

1. A conveniently transportable infant stroller for safely and smoothly carrying an infant over various terrain at speeds faster than average walking speed; said infant stroller comprising: a frame assembly consisting of three rigid members, hinged and constrained to move together by a releasable locking and folding means.

three wheels in tricycle relationship, supported by said frame assembly, each with its own axle.

axle support means between said frame assembly and said wheels.

seat means attached to said frame assembly, said seat means being dimensioned and positioned such that the center of gravity of the infant seated therein is generally between forward and rear wheels.

means of sheltering infant from weather.

shelter support means between said means of sheltering and said frame assembly; said shelter support means giving said sheltering means a plurality of positions.

2. A releasable locking and folding mechanism for hinging three cantilevered, rigid members, constraining them to move together in a controlled manner. Said mechanism comprising:

two meshing geared components, which rotate relative to a fixed component,

- a follower secured to each said meshing geared components,
- a spring-loaded piston secured to the fixed component,
- a means of retracting said piston against said spring, secured to said fixed component.
- 3. The releasable locking and folding mechanism in claim 2, wherein one said cantilevered, rigid assembly is secured to one of said meshing geared components,

another said cantilevered, rigid assembly is secured to the other said meshing geared components,

and the third said cantilevered, rigid assembly is secured to said fixed component, thus creating a constant angular relationship between said cantilevered, rigid assemblies.

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The releasable locking and folding mechanism in claim 2, wherein said followers contact said spring-loaded piston.

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- The releasable locking and folding mechanism in claim 2, when said releasable locking and folding mechanism is in its locked and open position, wherein the rotational freedom of said meshing geared components is constrained by said followers contacting said spring-loaded piston in one rotational sense and by a lack of gear teeth on said meshing geared components in the opposite rotational sense.
- 6. The releasable locking and folding mechanism in claim 2, when said releasable locking and folding mechanism is released from its locked position, wherein said means for retracting said piston against said spring is activated, unconstraining the rotational freedom of said followers against said spring-loaded piston.
- 7. The releasable locking and folding mechanism in claim 2, wherein said spring-loaded piston and said followers have an angled engagement tending to drive the piston into its highest possible position.
- 8. The releasable locking and folding/mechanism in claim 2, when said releasable locking and folding mechanism is released from its locked position, the force of gravity acting upon said cantilevered, rigid assemblies tends to rotate said cantilevered, rigid assemblies away or toward one another, depending on the orientation of the said releasable locking and folding mechanism with respect to the force of gravity.

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- The stroller in claim 1, wherein said frame assembly consists of three rigid members which are:
- a front fork which provides a mounting location for the front wheel in the tricycle configuration,
- a rear support which provides mounting locations for the rear wheels in the tricycle configuration, and
 - a handle par which provides a means for pushing said stroller.

The stroller in claim 9, wherein a means for supporting the infant's feet is secured to said front fork.

- 10. The stroller in claim 9, wherein said mounting location for the front wheel consists of a notch in which the axle of said front wheel is seated.
- The stroller in claim 9, wherein said mounting locations for the rear wheels consist of a hub assembly which provides a deployable brake to constrain the rotation of each of said rear wheels independently and a means for quick removal of said rear wheels.
- . 12. The stroller in claim 11, wherein said deployable brake consists of a lever, pinned to the hub assembly, which, when rotated, engages a toothed disk fixed to said rear wheel.
- 13. The stroller in claim 12, wherein a spring-loaded rod is attached to an arm of said lever and to said hub assembly, tending to force said brake lever to a fully deployed or fully undeployed position.
 - 14. The stroller in claim 11, wherein the means for quick removal of said rear wheels consists of a spring-loaded pin which engages a notch in the axle of said rear wheel, so that when said pin is forced against said spring, said axle is free to move in and out of said hub assembly.
- 15. The stroller in claim 1, wherein said means for sheltering the infant from weather consists of apiece of fabric supported by a batten or bent rod, the batten being secured to said shelter support means.
- 16. The stroller in daim 15, wherein said shelter support means consists of a rotating piece pivotally attached to said handle bar; said rotating piece being pinned to a spring-loaded rod.
- The stroller in claim 16, wherein rotational freedom of said rotating piece is constrained by a fastener seating in a groove on said rotating piece.

18. The stroller in claim_16, wherein said spring-loaded rod tends to force said rotating piece to either of the constrained rotational limits.